

YELINA, N. S.

"Action of Carotene on the Development of D-Hyperavitaminosis," *Farmakol. i Toksikol.*,
5, No. 3, 1942. Mbr., Vitamin Dept., Central Inst. Nutrition, Moscow, -1942-.

YELINA, E. M. and ETINGOF, R. N.

"On Storage of Enzymatic Preparations of Amino-Acid Decarboxylases,"
Biokhimiya, 19, No.1, pp 1-2, 1954

Chair of Biochemistry, 1st Medical Inst., Moscow

Translation NIH /M

YELINA, Z. D.

CH

11g

The relation between cholesterolemia in syphilis and the Wassermann reaction. N. N. Vasmitskil and Z. D. Elina. *Vestnik Venereol. i Dermatol.* 1938, No. 6:784-787. *Chem. Zentr.* 1939, I, 705. - The cholesterol content of the blood was detd. for 277 syphilitic patients in various stages of the disease. On the basis of 340 analyses it was concluded that there is no relation between the stage of the disease and the Wassermann reaction on the one hand and the cholesterol content of the blood and the lipid metabolism on the other. A hypocholesterolemia was found in a high percentage of patients. M. G. Moore

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

120000 46 120002 419 000 001 001100000

YELIN, Z. N.

USSR/Medicine - Veterinary

FD-1316

Card 1/1 : Pub 137-16/22

Author : Smirnov, A. M., Candidate of Veterinary Sciences; Elina, Z. N. and Kuznetsova, L. T., Senior Veterinary Physicians; ~~Makush, A. T.~~, Acting Senior Veterinary Physician of the Sovkhoz "Udarnik;" Milovidova, E. G., Student

Title : Treatment of calves that are ill with dyspepsia of A-hypovitaminosis etiology

Periodical : Veterinariya, 9, 49, Sep 1954

Abstract : Natural gastric juice of horses was successfully used in the treatment of calves that had dyspepsia of A-hypovitaminosis etiology; its use as a prophylaxis prevented the development of dyspepsia in calves born with symptoms of A-hypovitaminosis. Combination therapy, consisting of natural gastric juice of horses and either sintomycin or disulfan, is recommended. No mortality was recorded among calves that were treated with gastric juice of horses.

Institution : Leningrad Veterinary Institute

Submitted :

1. YELINEBAUM, Yu. I.
2. USSR (600)
4. Poultry
7. Problem of the moulting of hens. Ptitsevodstvo No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

STARSHINOV, B.N.; OBODAN, Ya.M.; YELJNEK, I.J.

Efficiency of using mazut in blast furnaces. Metallurg 9
no.10:9-12 0 '64 (MIRA 18:1)

LAYTA, Z.; YELINEK, M. [Jelinek, M.]

Anionic copolymerization of cyclic polysiloxanes. Vysokom.soad.
5 no.8:1268-1276 Ag '63. (MIRA 16:9)

1. Nauchno-issledovatel'skiy institut makromolekulyarnoy khimii,
Brno, Chekhoslovatskaya Sotsialisticheskaya Respublika.
(Siloxanes) (Cyclic compounds) (Polymerization)

YELINEK, Tomash [Jelinek, Tomas], inzh. [Chekhoslovatskaya Sotsialisticheskaya Respublika]; SYKOROVA, Vera, inzh. [Chekhoslovatskaya Sotsialisticheskaya Respublika]

Groups divided by subjects for industrial research. NTO 5
no.9:58-59 S '63. (MIRA 17:6)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962520020-4

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962520020-4"

1

YELINEK, V. I.

Defended his Dissertation for Candidate of Chemical Sciences in the Physicochemical Institute, Moscow, 1953

Dissertation: "Structure and Relaxation Properties of Highly Orientated Hydro-cellulose Fibers"

SO: Referativnyy Zhurnal Khimii, No. 1, Oct. 1953 (W/29955, 26 Apr 54)

KRESHKOV, A.P.; YELINEK, V.I.; SMIRENKINA, I.P.; MATVEYEV, V.D.

Thermography of certain alkoxysilanes in the phase transition from liquid state to vapor. Zhur.fiz.khim. 29 no.2:368-373 F '55. (MLBA 8:7)

1. Moskovskiy khimiko-tekhnologicheskii imeni D.I. Mendeleeva.
(Silanes) (Thermocouples)

AUTHORS: Kreshkov, A. P., Matveyev, V. D.,
Yelinek, V. I., Soucek, I. I.

SOV/76-32-9-1/46

TITLE: A Thermographic Study of Some Organosilicon Compounds (Issledovaniye nekotorykh kremniyorganicheskikh soyedineniy termograficheskim metodom)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9,
pp 1937 - 1941 (USSR)

ABSTRACT: Impurities in pure materials raise the boiling temperature and change the shape of the boiling-point curves. The authors here suggest a method by which the boiling temperature of the pure solvent may be determined from the thermograms (temperature-time graphs) of dilute solutions. This method is discussed first from a theoretical stand-point and is then illustrated using several examples. The test samples were first heated in a metal block, the temperature being measured by a recording pyrometer of the type used by N.S.Kurnakov. The thermograms of the investigated substances are reproduced (Figs 2-5), and the results are tabulated.

Card 1/2

The following solutions were investigated: aqueous solution

A Thermographic Study of Some Organosilicon Compounds SOV/76-32-9-1/46

of potassium chloride; hydroquinone in ethyl alcohol; oxalic acid in methyl alcohol; diphenyl in benzene; tetrabutoxy silane in tetraethoxy silane; and a tetraethoxy silane solution of the vat residue which remained after the distillation of the tetraethoxy silane. The method cannot be used if the impurity forms an azeotropic mixture in the solvent, or if the impurities are volatile. There are 5 figures, 1 table, and 4 references, 4 of which are Soviet.

ASSOCIATION: Khimiko-tekhnologicheskii institut im. D.I. Mendeleyeva, Moskva
(Moscow Chemical-Technological Institute imeni D.I. Mendeleyev)

SUBMITTED: January 29, 1957

Card 2/2

89748

S/072/61/000/003/001/003
B105/B206

15-2120

AUTHORS:

Kitaygorodskiy, I. I., Professor, Rostokinskiy, V. V.,
Yelinek, V. I.

TITLE:

Method of determining tear and elasticity of glass foils

PERIODICAL:

Steklo i keramika, no. 3, 1961, 8-11

TEXT: A method of continuous drawing of glass foils to a thickness of 1μ and less was elaborated and introduced at the kafedra tekhnologii stekla (Department of Glass Technology) of the Moskovskiy khimiko-tekhnologicheskii institut imeni D. I. Mendeleyeva (Moscow Chemical and Technological Institute imeni D. I. Mendeleyev). In this paper, the authors mention the first results of studies on elaborating the determination method of some physical properties of glass foils, i.e., tear and elasticity. Glass foils were tested for bending by means of compressed air, the diameters of the inserted foils being 10, 15, 20, and 30 mm. The pressure was measured with an accuracy of ± 0.02 atm, the bending with an accuracy of $\pm 2 \mu$. The spread of values of rupture

Card 1/7

89748

Method of determining tear and elasticity...

S/072/61/000/003/001/003
B105/B206

pressures P and bendings f for foils of window glass of 25μ thickness and 20 mm diameter is characterized by the distribution curves $q(P)$ and $q(f)$ (Figs. 2,3). The values for drawing up these diagrams were determined

by the following formulas: $q(P) = \frac{1}{N} \left(\frac{\Delta N}{\Delta P} \right)$, $q(P)$ being the distribution function; N the number of tests (in this case 75); ΔN the number of tests with results within the interval of pressures from P up to $P + \Delta P$; ΔP the selected interval of pressures (in this case 0.4 atm). The tests with glass foils were made with glass of two different compositions (aluminum-magnesium glass (1) and aluminum-calcium glass (2)). The dependence of bending on pressure was compared with similar values for foils of mica, cellophane and insulation paper of the same thickness (Fig. 4). The dependence of the reduced rupture pressure on the thickness of foils is shown in Fig. 5 for glasses No. 1 and No. 2. The tear resistance $\sigma_0 \max$ of the thin elastic plates which are rigidly clamped can be calculated

by means of formula 2: $\sigma_0 \max = 0.423 \sqrt[3]{E \left(\frac{P \cdot a}{h} \right)^2}$, E being Young's modulus

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S/072/61/000/003/001/003
B105/B206

Method of determining tear and elasticity...

in atm; h the thickness of the plate (foil) in cm; a the clamping radius of the plate in cm; P the pressure in atm; $\sigma_0 \max$ the maximum stress in the center in atm. Observations showed that glass foils broke in the center. Young's modulus is determined according to the formula by Ye. F. Pichugin: $E = \sum E_i m_i$, E_i being Young's modulus for every oxide present in the glass;

m_i the mole fraction of each component. The congruence of the calculated values of the rupture stresses σ_{rupt} , which were determined for various diameters of the clamped round samples, is described as being satisfactory (Table 2). The calculated dependence of the tear resistance of glass foils on their thickness is shown in Fig. 7 for glasses no. 1 and no. 2. The authors finally state that they have elaborated a method of determining the rupture pressure and rupture flexure of rigidly clamped glass foils, which allows to make a comparative estimation of their mechanical properties; comparative determinations of rupture pressure and rupture flexure of foils of various thicknesses were made for two glass compositions; the applicability of formula 2 was shown for an approximate estimation of the strength of glass foils, and it was stated that the strength of glass foils increased rapidly at a reduction of their

Card 3/7

89748

S/072/61/000/003/001/003
B105/B206

Method of determining tear and elasticity...

thickness, starting from about 100 μ .
2 Soviet-bloc references.

There are 7 figures, 2 tables, and

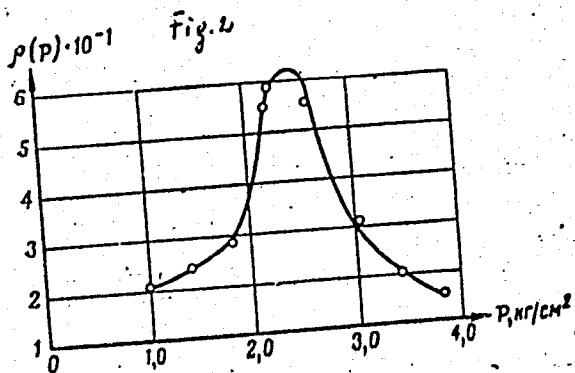


Fig. 2

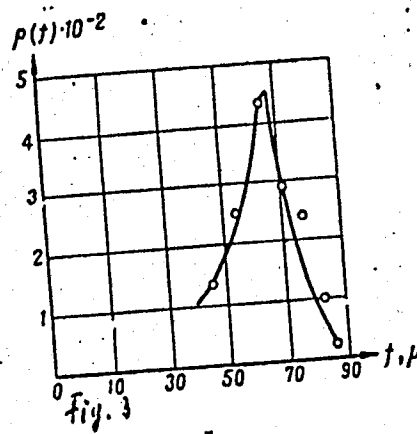
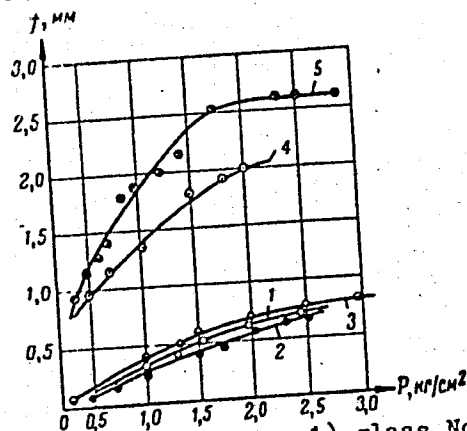


Fig. 3

Card 4/7

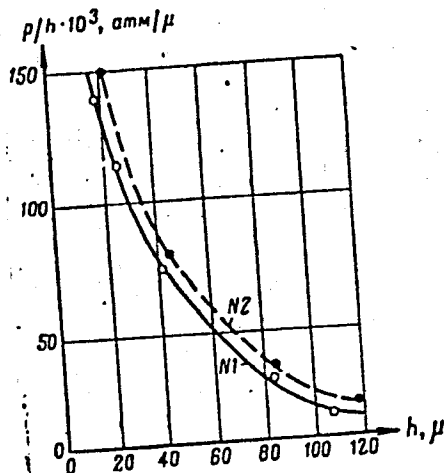
Method of determining tear and elasticity...



Legend to Fig. 4: 1) glass No. 1, thickness 25μ ; 2) glass No. 2, thickness 25μ ; 3) mica muscovite, thickness 25μ ; 4) insulation paper, thickness 30μ ; 5) cellophane, thickness 30μ .

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S/072/61/000/003/001/003
B105/B206



Legend to Fig. 5:
N1 = glass No. 1, N2 = glass No. 2.

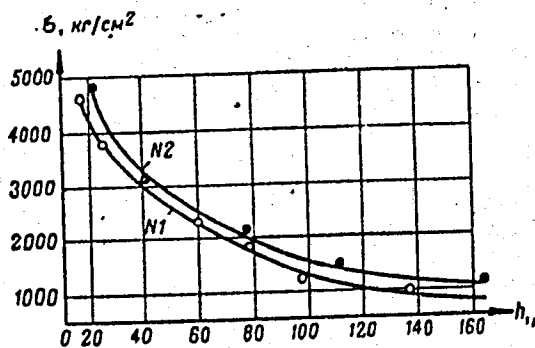
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B105/B206

Method of determining tear and elasticity...

Legend to Fig. 7:

N1 = glass No. 1, N2 = glass No. 2.



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89748
S/072/61/000/003/001/003
B105/B206

Method of determining tear and elasticity...

Legend to Table 2: a) diameter of the clamped sample, mm; b) rupture pressure (mean value from 15 measurements), atm; c) value of σ_{rupt} calculated according to Eq. (2), atm; d) deviation of σ_{rupt} from the arithmetical mean.

Таблица 2

a Диаметр заделки в мм	b Разрывное давление (среднее из 15 измерений) в кг/см ²	c Величина $\sigma_{разр}$ рассчитанная по формуле (2), в кг/см ²	d Отклонение $\sigma_{разр}$ от среднеарифм. величин в %
30	1,2	3,100	9,35
20	2,56	3,780	10,5
15	3,0	3,500	2,5
10	4,1	3,300	3,5

Card 7/7

KITAYGORODSKIY, I.I., prof.; ROSTOKINSKIY, V.V.; YELINEK, V.I.

Method of determining breaking and elastic characteristics of
films of glass. Stek. i ker. 18 no. 3:8-11 Mr '61.

(MIRA 14:5)

(Glass—Testing)

"APPROVED FOR RELEASE: 09/01/2001

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APPROVED FOR RELEASE: 09/01/2001

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"APPROVED FOR RELEASE: 09/01/2001

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"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962520020-4

APPROVED FOR RELEASE: 09/01/2001

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CIA-RDP86-00513R001962520020-4

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962520020-4"

ACC NR: AP6025396

(A)

SOURCE CODE: UR/0062/66/000/007/1145/1154

AUTHOR: Petrashko, A. I.; Yelinek, V. I.; Anisimov, K. A.; Zhdanov, A. A.;
Gashnikova, N. N.; Golubkov, G. Ia.; Litvinova, L. F.

37
B

ORG: All-Union Electrical Engineering Institute im. V. I. Lenin (Vsesoyuznyy elektrotekhnicheskiy institut); Institute of Organometallic Compounds, Academy of Sciences,
SSSR (Institut elementoorganicheskikh soedineniy Akademii nauk SSSR)

TITLE: Study of the conversions of polyorganosiloxanes in the course of thermal polycondensation and catalytic polymerization

SOURCE: AN SSSR. Izv. Ser khim, no. 7, 1966, 1145-1154

TOPIC TAGS: catalytic polymerization, polycondensation, siloxane

ABSTRACT: Changes in certain properties of polyorganosiloxanes were followed during their synthesis from organosiloxane oligomers of various compositions. IR spectroscopic analysis confirmed the structural differences in the oligomers obtained by double decomposition and hydrolytic polycondensation. In the process of thermal and catalytic conversions, these differences disappear, and the polymers have a similar structure independently of the method by which the original oligomers were prepared. It is postulated that thermal polycondensation involves the formation of oxygen bridges between the molecular chains as a result of condensation of hydroxyl groups, and hydrocarbon bridges as a result of oxidation of methyl groups of neighboring molecular chains; the

Card 1/2

UDC: 546.287+542.97+542.952+543.422

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ACC NR: AP6025396

relative importance of these two processes is determined by the composition and structure of the oligomers. Compared to thermal polycondensation, catalytic polymerization leads to the formation of polymers having a higher glass-transition temperature and a wider temperature range of the highly elastic state; this is due to a greater flexibility and mobility of the chains of their molecules owing to the opening of the cyclic links in the oligomer molecules. Orig. art. has: 5 figures and 3 tables.

SUB CODE: 07/ SUBM DATE: 14Feb64/ ORIG REF: 005/ OTH REF: 003

Card

2/2 OLR

YELINER, A. S.
CA

21

Spectral analysis of fuels. A. S. Eliner. *Tekhnika Vozdushnogo Flota* 1938, No. 12, 71-87. *Russk. Zhur.* 2, No. 4, 81 (1939). -- A short description of the general principles of the methods used for the detn. of hydrocarbons by means of infrared and of combination spectra. These methods developed by R. Cotton, Ober, Lecompte, Andant, Barshevits and Freiman are especially suitable for the analysis of gasolines. They make possible the detn. of all isomers of the individual hydrocarbons. Definite references to the chem. literature are not given.
W. R. Hann

ASS. S. L. A. METALLURGICAL LITERATURE CLASSIFICATION

LITERATURE CLASSIFICATION										SUBJECT CLASSIFICATION									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

~~RESTRICTED~~ D

YELINER, A. S.

CA: 35-1728/3

LANDSEERG, G. S., BEZHULIN, P. A., ROSENBERG, YU. V.
and YELINER, A. S.

(Phys. Inst., Academy of Sciences, USSR, Moscow)

Bull. acad. sci. URSS, Ser. phys. 4, 152-60 (1940)

Application of the Raman scattering of light in the analysis of motor
fuels.

~~RESTRICTED~~

13

YELINER, A. S.
CA

Cleaning valves of internal-combustion engines. A. S. Yeliner and B. E. Tsukerman. U.S.S.R. 67,114, Sept. 30, 1946. To remove deposited lead, valves are treated with a mixt. of AcOH and Na acetate at pH about 3.6 in the presence of Zn dust. M. Hoesch

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

LEKONT, Sh. [Lecomte, Jean]; KHEYMAN, A.S. [translator]; MARKHILEVICH,
K.I. [translator]; YMLINER, A.S. [translator]; TUMERMAN, L.A.,
red.perevoda; GESSEN, L.V., red.; GAVRILOV, S.S., tekhn.red.

[Infrared radiation] Infrazasnoe izluchenie. Pod red. L.A.
Tumermana. Moskva: Gos.izd-vo fiziko-matem.lit-ry, 1958. 584 p.
[Translated from the French] (MIRA 12:4)
(Infrared rays)

YELINETSKIY, I.A.

Mechanized apple slicing in the preparation of canned fruit. Konz.
i ov.prom. 18 no.3:16 Mr '63. (MIRA 16:3)

1. Chepturinskiy konservnyy zavod.
(Oktyabrskii--Canning industry--Equipment and supplies)

K

COUNTRY : USSR
CATEGORY : Forestry . FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1509
AUTHOR : Yelinetzkiy, L.M.
INST. : --
TITLE : Convincing Data on the Effect Forest Belts
Have on the Crop Yield.
ORIG. PUB. : Lesn. Kh-vo, 1958, No.5, 33-34
ABSTRACT : No abstract

CARD: 1/1

YELINETSKIY, Ye.F. [Ielinets'kiy, Ye.F.]

Experience in working out a method of experimental investigation of cortical processes in the reproduction of an action. Nauk. zap. Nauk.-dosl. inst. psikhol. 11:186-190 '59. (MIRA 13:11)

1. Pedagogicheskiy institut, Kamenets-Podol'sk.
(Movement, Psychology of)

FIKEL'SHTEYN, D.N.; YELINEVICH, A.P.; DYMCHENKO, V.N.

Chemical composition of smoke in dispersion phase found in manganese steel foundries. Gig. sanit., Moskva no. 1:25 Jan 1953. (GLML 24:2)

1, Of Sverdlovsk Oblast Institute of Labor Hygiene and Occupational Diseases.

OVCHININSKIY, N.N., dots.; KOSTYREV, A.S.; YELINEVSKAYA, N.S.

Surgical treatment of stab wounds of the heart (analysis of clinical cases). Khirurgiia, Moskva 34 no.11:36-41 N '58. (MIRA 12:1)

1. Iz kafedry obshchev khirurgii (zav. - prof. V.A. Ivanov) II Moskovskogo meditsinskogo instituta im. N.I. Pirogova (dir. - prof. O.V. Kerbikov).

(HEART, wds. & inj.
stab wds., surg. (Rus))

YELINOV K.

BULGARIA/Chemical Technology. Chemical Products H
and Their Applications. Ceramics, Glass,
Binding Materials. Concrete. - Ceramics.

Abs Jour : Ref Zhur-Khimiya, No 6, 1957, 20180

Author : B"charov, Sv., Gudzhev, Iv., Yelinov, K.

Inst : -

Title : Improvement of the Physico-mechanical
Properties of Faience Covered Tiles.

Orig Pub : Leka promishlenost, 1957, 6, No 3, 19-22

Abstract : No abstract.

Card : 1/1

Yelinov, N.P.

USSR/General Problems of Pathology - Immunity.

T-2

Abs Jour : Ref Zhur - Biol., No 4, 1958, 17165

Author : Yelinov, N.P.

Inst : -

Title : The Effect of Rabbit Leukocytes Upon Gonococci.

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiologii, 1956 (1957), prilozheniye, 57-58.

Abstract : The author observed in vitro phagocytosis of gonococci by rabbit leukocytes, whereas human leukocytes failed to phagocytose. In the presence of rabbit plasma, human phagocytes engulfed and digested gonococci after 24-48 hours. Gonococci were not subcultured from a 4-day-old culture. Rabbit leukocytes were less active in the presence of human plasma. Transfers from these cultures failed to result in an abundant growth of the colonies.

Card 1/1

*Dr. Chav Mikrobiologii Leningrad
Khimiko-biologicheskoy Institute*

YELINOV, N.P.

USSR/Microbiology - General Microbiology.

7-1

Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26225

Author : Yelinov, N.P.

Inst : -

Title : Carbohydrates Suitable for Growing Yeast-Like Fungi of the Genus Candida

Orig Pub : V sb.: Eksperim. i klinich. issledovaniya. II, L., Medgiz, 1956, 125-129

Abst : The most suitable source of carbon for the growth of an aggregate of various species of Candida is inulin. C. krusei grows well on glucose, C. albicans, C. pseudotropicalis, and C. triadis do well on maltose and glucose, while C. tropicalis will also grow on mannite, forming smaller cells. Sources of hydrogen for the genus Candida may also be found among the polyatomic alcohols and oxy acids. Aromatic compounds are not utilized by members of the genus Candida.

Card 1/1

11. $\text{Ar} \cdot \text{Ar} \cdot \text{Ar}$, $\text{Ar} \cdot \text{Ar}$

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents

U-7

Abs Jour : Ref. Zh. Biol., No 2, 1958, No 8109

Author : Kashkin, P.N., Bezborodov, A.M., Yelinov, N.P., Kashkin, K.P., Marohenkova, F.G., Tzyganov, V.A., Yamshohikov, V.P.

Inst :

Title : Materials on the Analysis of Failures in Antibiotic Therapy

Orig Pub : V. Sb. Antibiotiki. Eksperim.-Klinich. Izuch. M., 1956, 274-290

Abstract : Among the causes for failure in antibiotic therapy, the authors have emphasized bacterial resistance, appearance of moniliasis, and hormesis. An increased resistance to antibiotics is also characteristic of the facultative pathogens which more frequently develop a group tolerance. The streptomycin and biomycin resistant microorganisms

Card : 1/3

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents

U-7

APPROVED FOR RELEASE: 09/01/2001
Abs Jour : Ref. Zh. Biol., No 2, 1968, No 8109

CIA-RDP86-00513R001962520020-4"

Abstract : undergo more profound and more stable biochemical changes than those resistant to penicillin, levomyoin, and sintomyoin. Most of the resistant strains have a decreased tolerance to warming, alcohol, and antiseptic solutions. Alongside the highly resistant strains, dependant strains appear as a result of adaptation, especially among the tubercle bacilli, which grow luxuriously on media saturated with proper antibiotics. Yeast-like organisms of the genus Candida are frequently responsible for fatal complications in patients with dysentery and pneumonia. Monilia infections affect the mucous membranes of the oral cavity, larynx, vagina and the large skin folds; less frequently ulcerative lesions in the alimentary tract and focal pulmonary involvement are encountered. Streptomyoin, penicillin, sintomyoin, levomyoetin, biomyoin and sakazin proved to be ineffective in the treatment of moniliasis. Gramicidin-C, aspergillin and aspergin demonstrated some effectiveness. Streptomyoin, penicillin and

Card : 2/3

YELINOV, N.P. (Cand. of Bio Sci.); KASHKIN, K.P.; MARCHENKOVA, F.G.; TSYGANOV,
V.A. (Cand. of Bio. Sci.); YAMSHCHIKOV, V.P.; BEZBORODOV, A.M.

"Materials on Analysis of Failures in Treatment With Antibiotics,"

p. 274 Ministry of Health USSR Proceedings of the Second All-Union Conference on
Antibiotics, 31 May - 9 June 1957. p. 405, Moscow, Medgiz, 1957.

USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics.

F

Abs Jour : Ref. Zhur - Biol., No 21, 1958, No 95039

Author : ~~Yelino, N. P.~~
Inst : Leningrad Chemical-Pharmaceutical Institute
Title : Changeability of Gonococci Under the Influence
of Streptomycin.

Orig Pub : Sb. nauchn. tr. leningr. khim.-farmatsevt.
in-t, 1957, 3, 139-145

Abstract : With the passage; of cultures of gonococci into
mediums containing gradually increasing doses of
streptomycin, variants resistant to this anti-
biotic are isolated. The resistant cultures are
characterized by change of morphology and weak
fermenting activity. The increase of resistance
to the effect of some nonspecific factors is

Card 1/2

USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics.

F

Abs Jour : Ref Zhur - Biol., No. 21, 1958, No 95039

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001962520020-4

noted in the variants - to temperature, ultra-
violet rays, antiseptics; nitrate, silver, form-
alin, rivanol and other substances. -- V. G.
Petrovskaya.

Card 2/2

YELINOV, N. P.

COUNTRY : USSR
CATEGORY :
ABS. JOUR. : RZhBiol., No. 3 1959, No. 10078
AUTHOR : Yelinov, N. P.
INST. : Leningrad Chemical-Pharmaceutical Institute
TITLE : The Effect of Streptomycin on Gonococci in Cultures of Human Leucocytes
ORIG. PUB. : Sb. nauchn. tr. Leningr. khim.-farmatsevt. in-t, 1957, 3, 149-152
ABSTRACT : An increase in the resistance of gonococci (G) to streptomycin (I) can occur not only on artificial nutrient media but also in leucocyte cultures. G rapidly become accustomed to I; however, thorough resistance in leucocytes increases more slowly than in artificial nutrient media. When the concentration of I is increased both the morphology of G (appearance of lancet-like cocci, micrococci and gram-positive cocci) and their fermentative properties (delay in glucose

Card: 1/2

25

COUNTRY :
CATEGORY :
ABS. JOUR. : RZhBiol., No. 1959, No. 10078
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : fermentation) change. -- T. P. Vertogradova

USSR / Microbiology. General Microbiology. Physiol- F-1
ogy and Biochemistry.

Abs Jour: Ref Zhur-Biol., No 16, 1958, 71938.

Author : Yelinov, N. P.
Inst : Leningrad Chemicopharmaceutical Institute.
Title : Influence of Vitamins on the Growth of Pathogenic
Yeast-like Fungi of the Genus Candida in Synthetic
Media.

Orig Pub: Sb. Nauchn. tr. Leningr. khim.-farmatsovt. in-t,
1957, 3, 183-187.

Abstract: The growth of C. albicans is stimulated by thia-
mine, C. tropicalis - by thiamine, riboflavin and
to a lesser degree by ascorbic acid, C. pseudo-
tropicalis - by thiamine and riboflavin, C. triadis
- by thiamine and inosite and more weakly by ri-
boflavin and ascorbic acid, and C. krusei - by

Card 1/2

USSR / Microbiology. General Microbiology. Physiol- F-1
ogy and Biochemistry.

Abs Jour: Ref Zhur-Biol., No 16, 1958, 71938.

Abstract: nicotinic acid, thiamine and to a lesser degree
by riboflavin and ascorbic acid. Stimulation
of Candida by penicillin is correlated with the
content in the latter of a thiazole ring.

Card 2/2

YELINOV, N.P.

Urease activity of yeastlike fungi of the genus *Candida*. Eksp. 1
klin. issl. po antibiot. 1:99-104 '58. (MIRA 15:5)
(UREASE) (CANDIDA)

YELINOV, N.P.

Dehydrogenase activity of yeastlike fungi of the genus *Candida* in
the presence of antibiotics. Eksp. i klin. ishl. po antibiot. l:
105-109 '58. (MIRA 15:5)
(ANTIBIOTICS) (CANDIDA) (DEHYDROGENASE)

YELINOV, N.P.

Effect of some antibiotics on the catalase activity of yeastlike
fungi of the genus Candida. Eksp. i klin. issl. po antibiot. l:
110-113 '58. (MIRA 15:5)
(ANTIBIOTICS) (CANDIDA) (CATALASE)

YELINOV, N.P.

Experimental model of pulmonary candidiasis. Eksp. i klin. issl.
po antibiot. 1:173-185 '58. (MIRA 15:5)
(MONILIASIS)

YELINOV, N.P.; ZAYKINA, N.A.

Utilization of the precipitation reaction and serological diagnosis
in Candida infections. Zhur.mikrobiol., epid. i immun. 30 no.12:40-
44 D '59. (MIRA 13:5)

1. Iz Nauchno-issledovatel'skogo instituta antibiotikov.
(MONILIASIS diag.)

YELINOV, N.P., red.; ZIL'BERG, D.A., prof., red.; ARTAMONOV, B.P., dots.,
red.; RUDAKOVA, A.N., dots., red.; TSYGANOV, G.I., tekhn. red.

[Reports of a conference on June 23, 1960 devoted to the results of
work for 1959] Materialy nauchnoi konferentsii, posviashchennoi ito-
gam raboty za 1959 god; tezisy dokladov konferentsii 23 iyunia 1960 g.
Leningrad, 1960. 137 p. (MIRA 14:11)

1. Leningrad. Khimiko-farmatsevticheskiy institut. 2. Zamestitel' di-
rektora po nauchno-uchebnoy chasti Leningradskogo khimiko-farmatsev-
ticheskogo instituta (for Yelinov). 3. Zaveduyushchiy kafedroy gigiyeny
Leningradskogo khimiko-farmatsevticheskogo instituta (for Zil'berg).
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)
(BOTANY, MEDICAL)

YELINOV, N.P.; FROLOVA, M.A.; ZAIKINA, N.A.

Characteristics of the complement fixation reaction in candidiasis
treated by antibiotics and other preparations. Eksp. i klin. issl.
po antibiot. 2,110-115 '60. (MIRA 15:5)

(COMPLEMENT FIXATION)
(ANTIBIOTICS)

(MONILIASIS)

BYSTROVA, V.V.; DOBROMYSLOV, V.V.; YELINOV, N.P.; ZAIKINA, N.A.; KONDRAT'YEVA,
A.A.; MEDVEDKOVA, A.A.; SILUYANOVA, N.A.; FROLOVA, M.A.

Study of the antifungal properties and chemotherapeutic activity of
antibiotic 26/1. Eksp. i klin. issl. po antibiot. 2:289-295 '60.
(MIRA 15:5)

(ANTIBIOTICS)

YELINOV, N.P.

On the evaluation of haptenes from yeast-like fungi from the
family Candida under clinical and experimental conditions.
Vest.derm.i ven. 34 no.3:17-20 My-Je '60. (MIRA 13:10)
(CANDIDA) (ANTIGENS AND ANTIBODIES)

YELINOV, N.P.; BYSTROVA, V.V.

Cause of possible death of rabbits in immunization with yeast organisms. Zhur.mikrobiol.epid.i immun. 32 no.1:68-73 Ja '61.
(MIRA 14:6)

1. Iz Leningradskogo nauchnoOissledovatel'skogo instituta antibiotikov.

(YEASTS)

(SERUM)

KASHKIN, Pavel Nikolayevich; YELINOV, N.P., red.; LEBEDEVA, Z.V., tekhn.
red.

[Medical mycology; a short manual for doctors] Meditsinskaia
mikologiya; kratkoe rukovodstvo dlia vrachei. Leningrad,
Medgiz, 1962. 343 p. (MIRA 1:4)
(MEDICAL MYCOLOGY)

YELINOV, N.P.

Characteristics of the growth of yeastlike fungi of the genus
Candida in bismuth-sulfite and serin-sulfite media. Trudy Len.
khim.-farm.inst. no.13:63-69 '62. (MIRA 15.12)

1. Kafedra mikrobiologii (zav. prof. P.N.Kiselev) Leningradskogo
khimiko-farmatsevticheskogo instituta.
(CANDIDA)

ZAİKINA, N.A.; YELINOV, N.P.; YAKIMOV, P.A.

Purification of waste waters in the antibiotics industry. Trudy
Len.khim.-farm.inst. no.15:279-284 '62. (MIRA 15:11)
(ANTIBIOTICS) (INDUSTRIAL WASTES)

YELINOV, N.P.; ZAIKINA, N.A.

Lipids of asperogenic yeastlike fungi of the genus Candida.
Vop. med. khim. 9 no.2:177-180 Mr-4p '63. (MIRA 17:2)

1. Leningradskiy khimiko-farmatsvticheskii institut.

YELINOV, Nikolay Petrovich; ALEKSANDROV, P.N., red.

[Pathogenic yeastlike organisms] Patogennye drozhzhe-
podobnye organizmy. Moskva, Meditsina, 1964. 382 p.
(MIRA 17:5)

YELINOV, N.P., dotsent

Some studies in the field of medical mycology in the U.S.A.
Ves . derm. i ven. 37 no.9: 21-26 S '63. (MIRA 17:6)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

YELINOV, N.P.

[Elements of general mycology; aid for students] Elementy
obshchei mikologii; posobie dlia studentov. Leningrad,
Leningr. khimiko-farmatsevticheskii in-t, 1961. 29 p.
(MIRA 17:4)

YELIAZOV, N.P.; VITOVSKAYA, G.A.

Composition of antigenic preparations derived from yeastlike
fungi. Vop. med. khim. 11 no.4:18-24 J1-Ag '65. (MIRA 18:8)

1. Khimiko-farmatsevticheskiy institut, Leningrad.

YELINOV, N.P.; VITOVSKAYA, G.A.

Study of the chemical composition of hapten from *Rhodotorula glutinis*.
Biokhimiia 30 no.2:310-314 Mr-Apr '65. (MIRA 18:7)

1. Khimiko-farmatsevticheskiy institut, Leningrad.

YELINOV, N.P.; VITOVSKAYA, G.A.

Structure of hapten from *Candida pseudotropicalis*. *Biochimia* 30
no.5:933-938 S-O '65. (MIRA 18:10)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

YELINOV, N.P.; VITOVSKAYA, G.A.; TOMILINA, I.V.

Study of the composition of polysaccharide haptens from yeast
fungi. Zhur.mikrobiol., epid. i immun. 42 no.3:43-47 Mr '65.
(MIRA 18:6)

1. Leningradskiy khimiko-farmatsevticheskii institut.

YELINOV, N.P.; ZAIKINA, N.A.

Some properties of cell extracts from yeast fungi. Biul. eksp.
biol. i med. 59 no.5:82-84 '65.

(MIRA 18:11)

1. Leningradskiy khimiko-farmatsevticheskiy institut. Submitted
February 4, 1964.

YELINSKIY, I. I.

YELINSKIY, I. I. --"Technicoeconomical Designs of Ventilating Equipment."
Sub 22 Apr 52, Moscow Order of Labor Red Banner Engineering Construction
Inst imeni V. V. Kuybyshev (Dissertation for the Degree of Candidate in
the Technical Sciences)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

YELINSKIY, I. I.

YELINSKIY, I. I. - "Technical-Economic Calculations of Air Ducts and Pipelines."
Min Higher Education USSR. Moscow Order of Labor Red Banner Construction
Engineering Inst imeni V. V. Kuybyshev. Moscow, 1955. (Dissertation for
the Degree of Candidate in Technical Sciences)

So/ Knizhnaya Letopis' No 3. 1956

LEVIN, L.I.; YELINSKIY, M.P.

Treatment of facial neuritis with the subcutaneous administration of oxygen. Vop. psikh. i nevr. no.9:257-260 '62.
(MIRA 17:1)

1. Kafedra nervnykh bolezney Voenno-meditsinskoy ordena
Lenina akademii imeni S.M. Kirova.

ANTONOV, A.; YELINSON, A.; MYAGI, Kh.Ya. [Magi, H.]; KORROVITS, Kh.Kh.,
red.; KUKIN, V.N., red.; EINBERG, K., tekhn. red.

[Catalog of standard estimates for building operations for the
construction in the Estonian S.S.R.] Ehitustoode uksushinnete
kataloog Eesti NSV ehitustele. Katalog edinichnykh rastsenok na
stroitel'nye raboty dlia stroitel'stva v Estonskoi SSR. Izd.2.
Tallinn, Eesti Riiklik Kirjastus. Vol.1. 1960. 754 p.
(MIRA 15:2)

1. Estonian S.S.R. Riiklik Ehituse ja Arhitektuuri Komitee.
(Estonia--Building--Estimates)

SCIENCE Metallurg no. 2 1964 14-15

Card 1/6

1-7587-65
ACCESSION NR AP4045680

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CLASSIFICATION

Card 2 of 2

GALITSKIY, Yu.P.; CHUYKO, N.M.; PEREVYAZKO, A.T.; MOSHKOVICH, Ya.I.;
YERINSON, G.L.

Changes in the nitrogen content of metal during smelting and
its effect on the properties of a transformer sheet. Stal'
25 no.3:257-261 Mr '65. (MIRA 18:4)

1. Dnepropetrovskiy metallurgicheskiy institut i zavod
"Dneprospetsstal".

KAMARDIN, V.A.; LITVINOVA, T.I.; RAYCHENKO, T.F.; MOSHKEVICH, Ye.I.;
PORADA, A.N.; YELINSON, G.L.

Service of arc furnace bottoms in the smelting of stainless steel
with the use of oxygen. Ogneupory 30 no.1:23-28 '65.

(MIR/ 18:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut spetsial'nykh
staley, splavov i ferrosplavov (for Kamardin, Litvinova,
Raychenko). 2. Dnepropetrovskiy staleplavil'nyy zavod vysokokachest-
vennykh i spetsial'nykh staley (for Moshkevich, Porada, Yelinson).

L 10453-67 EWP(m)/EWP(t)/ETI IJP(e) JD
ACC NR: AP6022506

SOURCE CODE: UR/0133/66/000/004/0323/0326 38

AUTHORS: Moshkevich, Ye. I. (Candidate of technical sciences); Gabuyev, G. Kh.; Smolyakov, V. F.; Frantsov, V. P.; Grayfer, Ye. Z.; Spector, Ia. A.; Lavrent'yev, M. I. (Engineer); Yelinson, G. L. (Engineer)

ORG: none

TITLE: Manufacture of high-alloy steels with normalized phase composition

SOURCE: Stal', no. 4, 1966, 323-326

TOPIC TAGS: alloy steel, chromium steel alloy, high alloy steel / Kh16N9M2 alloy steel, OKh18N10 alloy steel, Kh18N9 alloy steel, 04Kh17N10M2 alloy steel

ABSTRACT: The possibility of obtaining stainless steels and intermediate type steels having a normalized phase composition (1 - 5% ferrite) under industrial conditions was studied. The experiments were carried out in electrical furnaces of 5-50 tons capacity, on charges consisting of fresh steel and scrap metal respectively. The α -phase content in the steels was maintained by chromium, nickel, and carbon additions. The phase composition was determined after the method of S. A. Iodkovskiy and M. N. Sashchin (Trudy TsNIITMASHa No. 13 (Vyplavka stali i proizvodstvo stal'nykh otlivok), ONTI TsNIITMASH, 1960). The experimental results are presented in graphs and tables (see Fig. 1). It was found that alloying with

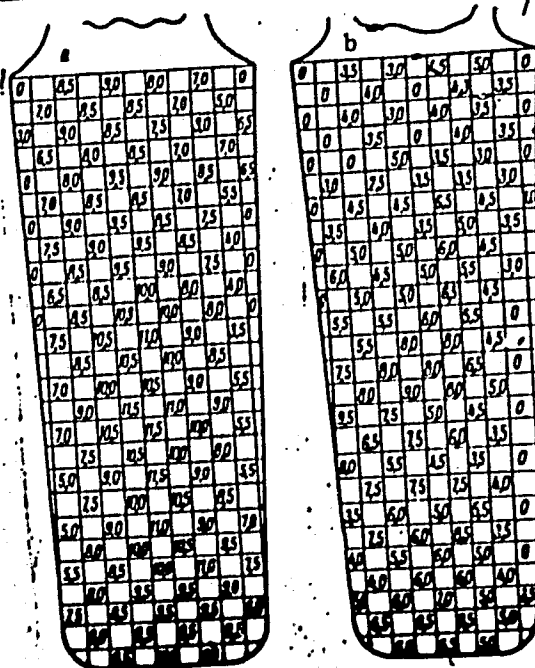
UDO: 669.187.2

Card 1/3

L 10453-67

ACC NR: AP6022506

Fig. 1. Distribution of ferrite (9-) in 2.8-ton ingots a and b of steel OKh16N9M2. Initial composition of ingot (a) and (b) respectively: C - 0.06, 0.07%; Mn - 1.0, 1.24%; Si - 0.40, 0.18%; Cr - 15.46, 15.60%; Ni - 9.0, 9.04%



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L 10453-67

ACC NR: AP6022506

6

Al-Ni as recommended by P. I. Melikhov, A. N. Boyarinova, 1 dr. (Stal', 1964, No. 4) was unnecessary. All specimens smelted had satisfactory mechanical and technological properties. N. N. Sashchin, V. S. Dub, P. M. Grashchenkov, I. A. Barmotin, and others took part in the experiments. Orig. art. has: 2 tables and 1 graph.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 004

Card 3/3 ⁶⁷⁷⁰

BUTALOV, V.A.; ANDREYEV, V.M., professor, retsentsent; NESSEL'SHTRAUS, G.Z.,
prof., kandidat tekhnicheskikh nauk; VIDULYA, P.M., prof., doktor tekhnicheskikh nauk, redaktor; YELINSON, I.B. [deceased], inzhener, redaktor; KRASAVTSEV, N.I., kandidat tekhnicheskikh nauk, dotsent, redaktor; MILANOV, O.V., inzhener, redaktor; MIRKIN, I.L., prof., doktor tekhnicheskikh nauk, redaktor; RUKAVISHNIKOV, B.S., inzhener, redaktor; SLAVKIN, V.S., inzhener, redaktor; LEBEDEV, A.I., redaktor; MIKHAYLOVA, V.V., tekhnicheskii redaktor.

[Technology of metals] Tekhnologiya metallov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1952. 471 p.
[Microfilm] (MLRA 7:12)
(Metals)

YELINSON, I., kand.tekhn.nauk; GRUDIN, L., inzh.

Simplified hand windlasses. Stroitel' no.5:23-24 My '61.
(MIRA 14:6)

(Winches)

YELINSON, I.I., kand. tekhn. nauk

Introducing automatic control in construction for the transportation
industry. Transp. stroi. 9 no.11:35-37 N '59 (MIRA 13:3)
(Road machinery) (Automatic control)

YELINSON, I. I., kand.tekhn.nauk

The TSNII Sa boring machine for making holes for contact network
poles. Transp. stroi. 10 no.9:26-28 S '60. (MIRA 13:9)
(Boring machinery) (Electric lines--Poles)

YELINSON, I.I., kand.tekhn.nauk; NASEDKIN, I.F., kand.tekhn.nauk

Making holes for contact-system poles in frozen ground. Transp.
stroil. 10 no.10:37-40 O '60. (MIRA 13:10)
(Electric lines--Poles) (Frozen ground)

GOLOVCHENKO, I.A.; ~~YELINSON, I.I.~~, starshiy nauchnyy sotrudnik; KHACHIKYAN, E.D.,
starshiy inzhener

Overhead crane equipment for trolley pole setting developed by the
Central Scientific Research Institute of Construction. Transp.stroi.
11 no.3:16-19 Mr '61. (MIRA 14:3)

1. Glavnyy inzhener Yuzhtransstroya (for Golovchenko).
(Cranes, derricks, etc.—Equipment and supplies)
(Electric lines—Poles)

YELINSON, I.I.; VELICHKIN, Ye.A., inzh., red.; VOROB'YEVA, L.V.,
tekhn. red.

[Drilling machine for developing trenches for contact network supports] Burovaia mashina dlia razrabotki kotlovanov pod opory kontaktnoi seti. Moskva, Izd-vo "Transport," 1964. 59 p. (MIRA 17:4)

YELINSON, I.I., kand. tekhn. nauk; CHIKHAREV, N.I., kand. tekhn. nauk

Practices in operating boring machinery in the winter time.
Transp. stroi. 15 no.3; 30-31, 35 Mr '65. (MIRA 18:11)

POPOV, Yu.I.; SLIZKIY, P.I.; YELINSON, I.M.; LEVCHENKO, F.A.;
KALASHNIKOV, Yu.T.; KISELEV, N.N.; redaktor; LEUTA, V.I., inzhener,
redaktor; HUDENSKIY, Ya.V., tekhnicheskii redaktor

[Model ESh 4/40 walking excavator] Shagaiushchii ekskavator
ESh 4/40. Pod red. N.N.Kiseleva. Kiev, Gos.nauchno-tekhn.izd-vo
mashinostroitel'noi lit-ry Ukrainskoe otd-nie, 1955. 152 p.
(Excavating machinery) (MLRA 8:10)

S/122/62/000/002/001/007
D262/D301

AUTHORS: Tselikov, A.I., Corresponding Member of AS USSR and
Yelinson, L.M., Engineer

TITLE: Basic trends in the development of metallurgical machine
building in the USSR in the near future

PERIODICAL: Vestnik mashinostroyeniya, no.2, 1962, 3-10

TEXT: The following points are discussed: 1) New technological processes, direct reduction of iron, converter process with oxygen blowing). 2) Increase in the productive capacity of metallurgical assemblies (new blast furnaces of 2700 m³ capacity using blast furnace gas at 2.5 - 3.7 atm. and air at 1200°C, capacity increase of steel melting plants and introduction of more electric arc steel furnaces, improvements in the productivity of rolling mills and pipe making plants by enlarging the sizes of machinery and increasing the rate of production). 3) Improvements in mechanization and automation of metallurgical plants (partial and eventually full automation of technological processes in blast furnaces, mechanization of steel

Card 1/2

Basic trends in the ...

S/122/62/000/002/001/007
D262/D301

melting plants, rolling mills, and pipe making plants, and introduction of new production control equipment of radioactive or x-ray type). 4) Machinery for protective coating of rolled iron and pipes (tin coating, zinc plating, varnishing, rubber, glass and enamel coating). 5) Introduction of more welded steel and reinforced concrete structures in place of castings. There are 7 figures. ✓

Card 2/2

ELINSON, M. I.

Investigation of autoelectronic emission of thin dielectric films. D. V. Zetsov, M. I. Elinson, and N. M. Levin. *Dokl. akad. na. U.R.S.S., Chernik. na. 1944, 100-11.*

Metallic [Al]-Al₂O₃-CaO emitters (C.A. 30, 3110°) were prepared by electrolytic oxidation of an Al surface, treating the Al₂O₃ with Ca vapors and oxidizing the Ca to CaO. The Al₂O₃ films were 2700 Å thick. The presence of CaO in the film increased the stability of the autoelectronic emission. Expts. indicate that most Al₂O₃ films, owing to the nonuniform thickness and porosity, cannot retain the pos. charges in their surfaces because of ruptures in the films and increased recombination; CaO fills in the pores, smooths the surface and makes the film more uniform. The dampening of the autoelectronic current during the initial moments after breaking the primary current is comparatively rapid. After several sec. the decrease in the current is retarded considerably and, sometimes, the current is stabilized at a very low value. The rapid initial decrease in the current is attributed to intensive recombination of the surface charge, owing to the presence of a large no. of slow electrons. The stabilization of the autoelectronic current is attributed to the effect of the ions of the residual gas sustaining the charge of the dielec. material, and to the direct ionization of its surface by fast electrons. In MgO films the autoelectronic current is, in the main, analogous to that obtained from the [Al]-

Al₂O₃-CaO films. However, the collector current changed very little with comparatively large variations in the primary current, and the change in the velocity of the primary electrons had no effect on the values of the caed. The autoelectronic current was stabilized less than 0.5 sec. after the breaking of the primary current, the stationary value of the current remaining considerably higher than with [Al]-Al₂O₃-CaO films. Irradiation of the emitter with primary electrons produced a uniform light-blue radiation on the surface of the emitter (a similar radiation was observed on [Al]-Al₂O₃-CaO films). The brightness of the radiation increased immediately after turning on the primary current and also with the increase in the velocity of primary electrons. Displacement of the primary bundle of the electrons by means of a magnetic field displaced the radiation along the surface of the emitter

without any perceptible inertia, indicating that the radiation was caused by the excitation of the surface atoms by the primary electrons. Stationary radiating spots whose brightness was considerably greater than that of the radiation was also observed on the MgO films. The position of these spots remained unchanged after the displacement of the primary bundle along the surface of the emitter by means of a magnetic field. Their brightness increased with the increase in the autoelectronic current. These spots did not disappear after breaking the primary current. Rupture of the film resulted in the disappearance of all or of a part of the radiating spots. These spots differed both in their color of radiation and in their brightness from sparks which appeared on rupturing the film. The spots were distributed more or less at random along the surface of the emitter. They appeared also in that part of the emitter that was not irradiated directly by the primary bundle. The properties of these spots indicate that they represent the points at which the autoelectronic current appears. Eighteen references. W. M. Hines

WELINSON, M. I., Engineer--

"Radial Electron-Ray Systems." Sub 29 May 47, Inst of Automatics and
Telemechanics, Acad Sci USSR

Dissertations presented for degrees in science and engineering in
Moscow in 1947.

SO: Sum.No. 457, 18 Apr 55

ZERNOV, D.V.; YELINSON, M.I.

Field emission and field-emission cathodes. Radiotekh. i elektron.
1 no.1:5-22 Ja '56. (MIRA 9:11)
(Electron emission)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962520020-4

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962520020-4"

SOV/112-59-1-1505

9(0)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 1,
pp 209-210 (USSR)

AUTHOR: Zernov, D. V., Yelinson, M. I., and Kharchenko, A. M.

TITLE: Prospects for ^{Developing} New Types of Electronic Devices for Automatic and
Telemechanic Equipment

PERIODICAL: Sessiya AS USSR po nauchn. probl. avtomatiz. proiz-va, 1956,
Vol 3, M., AN SSSR, 1957, pp 59-81

ABSTRACT: Electronic devices are used in automatic and telemechanical systems
for these purposes: (1) radiation primary elements (photoelectric devices),
magnetic-field primary elements (magnetic-tape recorders), etc.;
(2) amplifiers; (3) distributors (various pulse circuits that generate, convert,
form, distribute, delay, count electric pulses, etc.); (4) converters of
various types of signals; (5) multipliers and function tubes (used in computer-

Card 1/4

SOV/112-59-1-1505

Developing
Prospects for New Types of Electronic Devices for Automatic and Telemechanic . . .

type simulators); (6) storage devices for temporarily holding various signals available for subsequent readouts. In addition to conventional control-grid tubes, semiconductor devices, and various gas-discharge tubes, other electron devices are widely used: the devices acting as primary elements in transmission of movement, acceleration, pressure, magnetic field, etc., and special devices intended to replace a number of electron tubes; using a large number of tubes reduces reliability of a system as a whole. As a rule, the latter devices are of electron-beam type; a great flexibility of the electron beam, which under the influence of electric and magnetic fields changes its intensity and spatial position, is used. A detailed critical review of commercially-available photoelectric devices is given, and prospects of using them in various fields are indicated; an electron-beam device intended to reproduce signals from a magnetic tape is described. The circuit and characteristics of a device developed by IRE AN SSSR are presented, as well

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SOV/112-59-1-1505

Prospects for New Types of Electronic Devices for Automatic and Telemechanic . . .
as data on new high-transconductance tubes, grid-control secondary-emission tubes, beam-deflecting tubes, and electrometric tubes. A principal diagram is given of a simple 10-cavity ring trochotron developed by IRE AN SSSR; the trochotron develops output currents up to 10-12 ma and has output circuits independent of control and switching circuits. The trochotron can be used as a multichannel distributor for pulse counting, frequency division, modulating a single carrier by several audio channels, strobing and matrix circuits, coding, timing, etc. Information is submitted on a binary switch developed by IRE AN SSSR. A description is presented of electron-beam coding tubes and of secondary-emission contact tubes which are characterized by low internal resistance, about one kohm; the tubes can convert signals (DC into AC, change the type of modulation, help in noise elimination, or make reception more convenient, etc.); they can also serve for various types of switching, etc. Development of beam switching tubes with a small number of contacts in one envelope and multichannel tubes with a low input signal (10-100 microvolts and

Card 3/4

SOV/112-59-1-1505

Prospects for New Types of Electronic Devices for Automatic and Telemechanic . . .

lower) is promising. A few types of electron-beam multipliers and formatrons — the devices whose output current is a specified function of the input — i.e., function devices, are described. Data is also supplied on electron-beam storage tubes regularly produced in the USSR and on those described in foreign publications.

Ye. M. M.

Card 4/4

109-2-1-10/17

AUTHOR: Yelinson, M. I., and Zernov, D. V.

TITLE: On the Mechanism of Electron Emission from Thin Dielectric Layers
Under the Influence of a Strong Electric Field (Malter Effect) (K voprosu o
mekhanizme elektronnoy emissii tonkikh dielektricheskikh sloyev pod
deystviyem sil'nogo elektricheskogo polya (effekt Moltera))

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol 2, Nr 1, pp 75-84 (USSR)

ABSTRACT: Existing notions of the mechanism of the Malter effect are considered
in the article. It is pointed out that these notions cannot explain all the known
experimental facts of today. A new viewpoint is offered and substantiated,
which is based on an assumption that the potential within the dielectric film is
essentially nonhomogeneous.

The Malter effect is described, and the substances whose films are capable of
producing such an effect are listed. It is considered unquestionable that the
fundamental factor causing emission from a dielectric film is a strong electric
field within the film. It is not clear, however, which of the many phenomena
caused by a strong electric field is the fundamental phenomenon in the mechanism

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On the Mechanism of Electron Emission from Thin Dielectric Layers (Cont.)

of emission. A number of published experimental works are reviewed, and these inferences drawn: (A) Electron velocity spectrum comprises two groups, slow and fast; the latter consists of Malter electrons. (B) Energies of Malter electrons are grouped around the Fermi level of the backing. (C) With film thicknesses close to the critical thickness, the width of the Malter-electron spectrum is relatively small (about 4 volts). For a film 50% thicker, the spectrum width is about 14 volts. (D) A variation of the work function of the collector material is associated with a shift of the velocity-distribution curve, just as in the case of a field emission in a vacuum.

Two existing theories of the Malter emission are criticized and are either found to be unable to explain some of the known facts, or to be contradictory to them. The new qualitative theory of Malter effect offered by the authors is based on the following principal facts: (A) The Zener formula (reference 17) cannot be used for calculating field emission current from the metal backing into the dielectric; (B) A sharp rise in breakdown field intensity of thin dielectric films, starting from $2 \cdot 10^{-5}$ cm and thinner, has been found experimentally and

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On the Mechanism of Electron Emission from Thin Dielectric Layers (Cont.)

substantiated theoretically. Film breakdowns, fluorescence of emission spots, self-sustaining of emission, etc., testify to the fact that non-elastic collisions of Malter electrons with lattice, i.e., excitation and shock ionization, take place within the film. Grouping of emitted electrons around the Fermi level of the backing with a relatively high barrier at the metal-dielectric boundary conclusively demonstrates the tunnel mechanism of electron transition from the backing into the dielectric film. Apparently, it can be assumed that practically all voltage drop is concentrated close to the surface of the backing (figure 4), within $250 \pm 100 \text{ \AA}$. It should also be assumed that the Malter emission has a steady-state nature. With very thin films, only a small part of fast electrons takes part in ionization; this part grows with the thickness of the film. It is natural to assume that at some spots of the film, the potential has a near-linear distribution. The authors examine in detail many experimental facts corroborating the above viewpoint. The irregular potential distribution within the film is due to spatial distribution of impurities within the film and also to the distribution of their energy levels, according to the authors. If this mechanism of

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